

Notice of Allowability

Application No.

10/561,962

Applicant(s)

OOURA ET AL.

Examiner

Art Unit

Fred M. Teskin

1713

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☐ This communication is responsive to ____.
2. ☒ The allowed claim(s) is/are 1-8.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☒ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: ____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date ____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date ____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date 122205
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date ____.
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other ____.

Reasons for Allowance

The following is an examiner's statement of reasons for allowance:

Applicants' claim (claim 1) a process for producing a vinyl chloride-based polymer, wherein a suspension polymerization of either vinyl chloride monomer, or a mixture of vinyl chloride monomer and another copolymerizable monomer, is conducted in a polymerization vessel fitted with a reflux condenser, the process comprising:

(A) adding to a reaction mixture a high-activity, oil-soluble polymerization initiator, with a 10-hour half life temperature of no more than 40°C at a concentration of 0.1 mol/L in benzene, for a specified time within a period from commencement of heat removal using said reflux condenser through to completion of polymerization,

(B) adding water either continuously or intermittently to said reaction mixture through a supply pipe for said polymerization initiator, at least *during a period from commencement of addition of said high-activity, oil-soluble polymerization initiator through to completion of said addition*, and

(C) passing steam through said supply pipe *following completion of addition of said water*.

The closest prior art of record discloses a method for preparing vinyl chloride polymers which includes the step of polymerizing vinyl chloride monomer in an aqueous medium in the presence of a polymerization initiator and which is characterized by washing a pipe and an opening for charging the polymerization initiator into a polymerizer with water or water steam *after charging the polymerization initiator* into the

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polymerizer through the opening and piping (Amano '988: col. 2, ll. 38-42 and col. 3, ll. 9-12).

In other words, Amano '988 requires passing water or water/steam through the pipe and the opening for charging the polymerization initiator only *after* the initiator has been charged into the polymerizer. By contrast, the present invention stipulates adding water to the reaction mixture through a supply pipe for the polymerization initiator at least *during* a period from commencement of addition of the defined initiator through to completion of such addition. The present invention further requires passing steam through the same supply pipe following completion of addition of the water. Amano '988 nowhere contemplates such sequential charging of water and steam through the pipe and opening for charging the polymerization initiator into the polymerizer.

Amano '988 fails to teach or fairly suggest adding the polymerization initiator, water and steam in the manner claimed.

A search of the relevant art has revealed no prior art that can be used, either singularly or in combination, to render the presently claimed process anticipated or obvious to a person having ordinary skill in the art at the time the invention was made.

Accordingly, claims 1-8 are deemed to define allowable subject matter and passed to issue.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

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Citation of Pertinent Art

The prior art made of record and not relied upon is considered pertinent to applicants' disclosure.

Amano '524 is pertinent in its disclosure of externally heating the charging passage for introducing polymerization initiator into a vinyl chloride polymerization vessel after the initiator has been charged into the vessel.


Contact Information

Any inquiry concerning this communication should be directed to Examiner F. M. Teskin whose telephone number is (571) 272-1116. The examiner can normally be reached on Monday through Thursday from 7:00 AM - 4:30 PM, and can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu, can be reached on (571) 272-1114. The appropriate fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

FMTeskin/06-12-06


FRED TESKIN
PRIMARY EXAMINER
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